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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,163	06/28/2001	Stephen C. Davis	A179 1010.1	1461

7590 11/15/2002

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EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/897,163

Applicant(s)

DAVIS ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 15-30 and 40-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 31-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 1-14 and 31-39 in Paper No. 5 is acknowledged.

***Specification***

2. The specification is objected to because of the misspelling of butadione, page 5, line 5. Correction is required.

***Claim Objections***

3. Claims 3, 33 and 35 are objected to because of the following informalities: In claims 3 and 33, line 3, the term "butadione" is misspelled. In claims 33 and 35, the period is missing at the end in each claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 31, and 35-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Horowitz et al (US 4,107,228). Horowitz discloses a paint composition being applied to Noryl foam substrate (test results). Horowitz also teaches the paint composition comprising urethane prepolymer, vinyl monomer, silver nitrate, UV blocker and peroxide (example 1 and column 3, line 3, 59 and 63). It is the examiner's position that Horowitz anticipates the claimed subject matter.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 6-14, 31-33, and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanduja et al (US 6,414,048) in view of Kreiser et al (US 6,245,267). Sanduja meets all the limitations as set forth in the claims except a low density polymeric foam substrate (abstract, example 1). Sanduja discloses the substrate being polyolefin tubing (abstract). Kreiser teaches a polyolefin foam can be used as a tube insulation for pipes (column 6, lines 1-3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the polyolefin foam as a substrate motivated by the desire to lower the thermal conductivity of the pipe and the cost of the production (Kreiser, column 5, line 60 et seq.).

With regard to claims 2, 3, 32 and 33, Kreiser discloses a low density polyethylene foam having the density of 0.024 g/cm<sup>3</sup> (example 2).

With regard to claims 6-13, and 35-39, Sanduja reads on the limitations (example 1).

With regard to claim 14, Sanduja is silent as to the thickness of the coating. Thus, the skilled artisan must rely on his own knowledge. It would be obvious to one of ordinary skill in the art to employ as little of the coating as possible in order to reduce

cost. Thus, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the coating with the thickness instantly claimed since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involved only routine skill in the art. *In re Aller*, 105 USPQ 233.

8. Claims 4, 5, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanduja et al (US 6,414,048) in view of Kreiser et al (US 6,245,267) as applied to claims 1 and 31 above, in view of Stoddard (US 6,110,525). The combination of the primary and secondary references fails to teach the presence of the latex in the coating composition. Stoddard teaches a coating composition comprising a latex of rubber particles (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the latex in the coating composition motivated by the desire to increase the degree of flexibility of the coating (Stoddard, column 2, lines 32-39).
9. Claims 1-3, 6-14, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz et al (US 4,107,228) in view of Kessler (US 4,274,236). Horowitz meets all the limitations as set forth in the claims except a low density polymeric foam substrate (test results, example 1 and column 3, line 3, 59 and 63). Horowitz discloses Noryl foam, a structural foam, having been used a substrate (test results). Kessler teaches a structural foam can be polyvinyl chloride (abstract). It would have been obvious to one having ordinary skill in the art at the time the

invention was made to replace the Noryl foam by PVC foam as a substrate because PVC foam is inexpensive and commercially available.

With regard to claims 2, 3, 32 and 33, Kessler is using the same material, i.e., PVC foam to form a substrate as Applicants, it is the examiner's position that the foam density would be inherently present.

With regard to claims 6-13, Horowitz also teaches the paint composition comprising urethane prepolymer, vinyl monomer, silver nitrate, UV blocker and peroxide (example 1 and column 3, line 3, 59 and 63).

With regard to claim 14, Horowitz is silent as to the thickness of the coating. Thus, the skilled artisan must rely on his own knowledge. It would be obvious to one of ordinary skill in the art to employ as little of the coating as possible in order to reduce cost. Thus, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the coating with the thickness instantly claimed since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involved only routine skill in the art. *In re Aller*, 105 USPQ 233.

10. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz et al (US 4,107,228) as applied to claim 31 above, in view of Stoddard (US 6,110,525). Horowitz is silent as to the latex in the coating composition. Stoddard teaches a coating composition comprising the latex of rubber particles (abstract). It would have been obvious to one having ordinary skill in the art at the time the invention

was made to employ the latex in the coating composition motivated by the desire to increase the degree of flexibility of the coating (Stoddard, column 2, lines 32-39).

### **Conclusion**

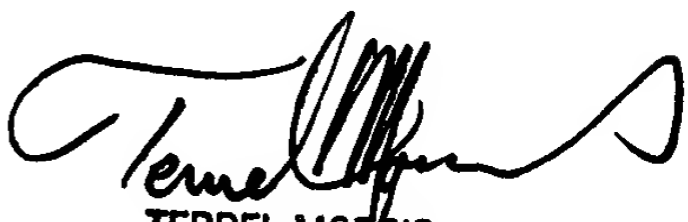
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426.

The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV  
November 7, 2002

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700